# Notes on the avifauna of Isla Grande and Patagonia, Argentina

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Recent field studies in Southern Argentina have resulted in much new information on the distribution and biology of many avian species. This paper deals largely with information obtained in Tierra del Fuego and Patagonia in the austral winters of 1971 and 1972, and the austral summer of 1973, under studies supported by the National Science Foundation.

## ISLA GRANDE

Tierra del Fuego comprises all of the islands south of the Strait of Magellan. The avifauna of Isla Grande has been reviewed by Humphrey, Bridge, Reynolds and Peterson (1970). Additional general information has been contributed by Keith (1970), by Weller (1975) on waterfowl populations, and by Parmelee and MacDonald (1975) on the breeding birds of two islands in the Strait of Magellan. From 23 October and 4 November 1973, we conducted studies on Isla Grande, principally in the vicinity of Rio Grande in the northeastern part of the island (see Jehl, 1975) but were also able to transect the Argentine side of the island between the Strait of Magellan and the Beagle Channel. Because our arrival time was earlier in the austral spring than that of most other ornithologists, we were able to obtain information on arrival times and breeding seasons that has not been available previously, as well as new distributional data. Additional data gathered by Rumboll during subsequent research in the area, are also included. The data in this report pertain specifically to 1973 unless stated otherwise. Specimens collected are deposited in the San Diego Natural History Museum (SDNHM). More detailed information on localities in Tierra del Fuego may be found in Humphrey et al. (1970).

Rockhopper Penguin (Eudyptes crestatus).—Single birds found dead on the beach at Viamonte on 25 October and at Rio Grande on 29 October 1973 constitute the only October records for a species which is doubtless present year-round.

Macaroni Penguin (Eudyptes chrysolophus).—Humphrey et al. (1970) knew of only two specimen records (February, March). Rumboll saw a live bird, apparently an immature, captured by tourists

near Viamonte on 4 March 1973.

Black-browed Albatross (Diomedea melanophris).—Stiles (1974) reported six birds at Lago Fagnano, a large, inland, fresh-water lake, in December 1972 and discussed the possible significance of his observations with regard to the long-rumored existence of an albatross colony in nearby mountains. Our observations of two birds washed ashore on the eastern shore of the lake on 5 November further indicate that the species may occur there with some regularity.

Olivaceous Cormorant (Phalacrocorax olivaceus).—At Ea. San José, Sr. T. Mackay showed us the remains of a colony that had been recently destroyed when beavers (Castor canadensis) cut down the nest trees. According to Sr. Mackay the colony normally contained 80-100 nests and had been there

for many years.

Blue-eyed Cormorant (Phalacrocorax atriceps).—Humphrey et al. (1970) concluded that "there are very few records indeed of P. atriceps" for Isla Grande, but the species is commoner in the western Strait of Magellan than they recognized (Jehl, 1973; Brown et al., 1973; see also below). We found one dead, Rio Grande, 29 October (SDNHM no. 38639), two dead at Lago Fagnano (one saved, SDNHM no. 38638) on 5 November, and saw one at Cabo Peñas, 30 October. As noted by Reynolds (in Humphrey et al., 1970), the species nests on islands in Lago Yehunin (Rumboll, pers. obs.).

Buff-necked Ibis (Theristicus caudatus).—Fairly common and widespread in the northeastern part of the island. We found a nest (c/2) on the ground on an island at Ea. Los Flamencos on 31 October, along with many nests of Kelp Gulls (Larus dominicanus) and two nests (c/3) of Black-necked Swans (Cygnus melanocoryphus). On 10 November, Sr. Mackay showed us a colony of 60-80 pairs in the woods at Ea. San José. The colony had been robbed recently, and only a few nests contained eggs; no

Ashy-headed Goose (Chloephaga poliocephala).—Humphrey et al. (1970) considered this goose "relatively uncommon" and Weller (1975) did not find it north of Viamonte. However, in late October it was common at Viamonte and Los Flamencos, and scattered birds were seen north to San Sebastián; many observations probably pertained to non-breeding birds. It was fairly common in forested areas at Lapataia, and on 7 November we found two nests (c/5, c/6).

Ruddy-headed Goose (Chloephaga rubidiceps).—This species was once abundant on Isla Grande, and as recently as 1970 Humphrey et al. considered it common. It is now very rare as a result of control measures instituted primarily against the Upland Goose (C. picta; see also Weller, 1975). During our investigations, which covered a large part of the northern half of the Argentine side of the island, Rumboll counted only 30 individuals; subsequent reports (Rumboll, 1975) suggest a further decrease. The species is clearly on the verge of extirpation.

Upland Goose (Chloephaga picta).—The Upland Goose remains an abundant species on Isla Grande though massive control measures (harvesting of eggs, destruction of young, shooting of adults) are certainly having important roles in limiting its population (see Humphrey et al., 1970; Delacour, 1954).

As is well known, males of this species are polymorphic, with the barred form (C. p. dispar) predominating in Tierra del Fuego and the white-bodied form (C. p. picta) in Patagonia (Delacour, 1954). Humphrey et al. (1970) concluded that on Isla Grande "the barred form... is by far the most abundant and the white breasted form... is seen seldom and always in small numbers." In our studies we found white-breasted birds fairly common in the northern part of the island; on 25 October they comprised 10-15 per cent of the hundreds of geese in the marshes near Bahía San Sebastián. Only a few kilometers farther south, however, where the land was slightly higher, they became decidedly rare and few were seen south of Ea. Sara. Yet some were present as far south as the Beagle Channel; on 7 November we saw 5 males and 2 females among the abundant dispar at Lago Roca.

Delacour (1954: 219) states that within this species "the females are all much alike, and individual variation is slight." To the contrary we found that females were also polymorphic and could, in most cases, be assigned by head color to picta (pale sandy brown) or dispar (warm medium brown). On 25 October we noted pair preferences among mated geese in two localities: the marshes at Bahía San Sebastián; and between the south coast of Bahía San Sebastián and Ea. Sara. Geese were assigned to white (W), intermediate (I), or barred (B) categories. Although this grouping is crude and does not fully allow for the amount of plumage variation that occurs, the results (Table 1) clearly show a strong tendency for assortive mating. In the Ushuaia area nesting had begun and it was not possible to determine which birds were mated; in one pair at Lago Roca a picta female was paired with a dispar male.

Humphrey et al. (1970) summarized evidence suggesting strong differences between picta and dispar in ecology and migration, and wondered (p. 118) "if the two phases prior to the arrival of the white man and sheep were not more separated ecologically during the breeding season." They suggested, quite reasonably, that increased habitat disturbance has allowed the forms to come into secondary contact within the past 75 to 100 years. Our data on assortative mating suggest that premating isolating mechanisms had been developed between the two forms, and these are currently being tested in northern Tierra del Fuego. The situation is a dynamic one deserving careful study especially in view of the tremendous economic importance of these geese.

White-cheeked Pintail (Anas bahamensis).—Humphrey et al. (1970) knew of only one sight record on Isla Grande. Three recent sightings establish that the species probably reaches the area irregularly: one, Rio Ewan, 22 January 1975; eight, Cabo San Pablo, 2 February 1975; four, Lapataia, 27

January 1975.

Crested Duck (Lophonetta specularoides).—Common to abundant in the northern part of the island as well as in the Ushuaia area. Nesting begins in early spring. We found clutches of 3, 7, and 8 eggs near Rio Grande between 25-28 October, one of which hatched on 30 October, and a pair with week-old chicks at Lapataia on 7 November. Humphrey et al. (1970) were uncertain of its breeding status. Weller (1975) reported many broods that "must have hatched in early to mid-January."

Flightless Steamer-Duck (Tachyeres pteneres).—Neither Humphrey et al. (1970) nor Weller (1975) recorded this species on the northeastern coast and thus the observation of a single bird with a flock

of Flying Steamer-Ducks (T. patachonicus) at Viamonte on 23 October is of interest.

Flying Steamer-Duck (Tachyeres patachonicus).-A nest with six eggs on the shore of a small

pond north of Rio Grande, on 28 October, was still being incubated on 13 November.

Andean Condor (Vultur gyrphus).—In view of the many sight records for this unmistakable species in the Ushuaia area (e.g., 3-4 at Lapataia, 6 November; 3 Monte Olivia, 8 November), its designation by Humphrey et al. (1970) as "hypothetical" suggests an excessively strict standard for the acceptance of distributional data.

Red-backed Hawk (Buteo polyosoma).—Humphrey et al. (1970) considered this species "common... throughout Isla Grande." While en route to Ushuaia on 5 November we saw several birds in the forested area, yet in nearly three weeks near Rio Grande saw only one. Hunting pressure is probably responsible for the apparent decline.

Cinereous Harrier (Circus cinereus).—Humphrey et al. (1970) had no proof of nesting. We saw a pair courting at Ea. José Menendez on 27 October. One bird dropped to the ground and disappeared

into the undergrowth, but we were unable to locate the nest.

Chimango Caracara (Milvago chimango).—Although Humphrey et al. (1970) considered this species common everywhere, we found it so only in the wooded southern part of the island. In the north it is

Table 1. Assortative mating patterns in Upland Geese in northern Tierra del Fuego, W = whitebreasted forms (C. p. picta), B = barred forms (C. p. dispar), I = intermediates. Data obtained 25 October 1973.

Bahía San Sebastián Marshes <sup>1</sup>				Between	Between Bahía San Sebastián and Ea. Sara			
	W♂	Io⁵	Bo⁵		W♂	10	В♂	
W₽	17	2	2	<b>W</b> 9	5	_	_	
1 9	1	3	2	I♀	-	1	_	
В♀	2	1	96	В₽	_	1	82	

<sup>&</sup>lt;sup>1</sup>Unassigned birds in the area included  $W\vec{O}$ -10,  $W\vec{P}$ -10,  $I\vec{O}$ -52,  $I\vec{P}$ -85,  $B\vec{O}$ -154,  $B\vec{P}$ -300.

decidedly rare as a result of hunting and poisoning. Near San Sebastián we found 12 dead in one small field, and carcasses strewn along the roadside were a common sight.

Crested Caracara (Polyborus plancus).—The Crested Caracara, or Carancho, is thought by local inhabitants to peck out the eyes of newborn lambs, and thus is hunted mercilessly. Between 22-25 October we found more than 10 carcasses along major roadways, often in association with the remains of other predators: Black-chested Buzzard-Eagles (Geronoaetus melanoleucus); Chimangos, and Patagonian Foxes (Dusicyon culpaeus). Though commoner than the Chimango, and still fairly common in the northern half of the island, the Carancho seems to be decreasing.

Peregrine Falcon (Falco peregrinus).—Rumboll saw two adults and a newly-fledged juvenile at Lago Escondido on 27 January 1974. This is the most convincing evidence to date that the species actually nests on Isla Grande.

Pallid Falcon (Falco kreyenborgi).—The status of this rare falcon is so poorly known that all records are of interest. Rumboll saw one feeding on a large passerine (presumably Pezites militaris) 4 km north of Misión, near Rio Grande, on 3 May 1975. On 11 May, he saw a single bird at Ea. Condor just north of the Strait of Magellan, and 200 km north of Misión. These sightings may have been of the same individual.

Aplomado Falcon (Falco femoralis).—The observation of a bird 20 km north of Lago Fagnano on 5 November is of interest because of the species' general rarity on Isla Grande and its alleged absence from the forested part of the island (Humphrey et al., 1970).

Magellanic Oystercatcher (Haematopus leucopodus).-This oystercatcher breeds commonly in pastures up to 8 km inland in the Rio Grande area, but farther inland, where the land is drier, is rare and local. Hundreds of non-breeders were on the beach at Rio Grande on 24 October, and perhaps 100 were in the harbor at Ushuaia on 7 November. Nesting begins in October. On 24 and 25 October we found nests, (each c/2), and by 29 October some pairs began to act as if they had chicks.

Chilean Lapwing (Vanellus chilensis).—This species, common in the northeastern part of the island, begins nesting in October. We found a nest (c/3) on 23 October and a broad on 9 November.

Black-bellied Plover (Squatarola squatarola).-One at Rio Grande on 29 January 1974. There are no previous records for this species, which only occasionally winters as far south as Buenos Aires Province.

Two-banded Plover (Charadrius falklandicus).-Humphrey et al. (1970) considered this plover uncommon and stated that "there are very few records for the northeastern part of the island." By contrast, we found it common on the coastal plain, with pairs nesting along the coast as well as on the shores of lakes and ponds. Nesting may begin by early October. At Laguna de los Cisnes, in Rio Grande, we found nests (each c/3) on 23 and 24 October, and newly-hatched chicks from a third nest on 28 October. Rumboll banded 2 very small chicks at Yrigoyen, in the southeastern part of the island, on 17 January 1974.

Rufous-chested Dotterel (Charadrius [Zonibyx] modestus).-This species seems rare and local in the northeastern part of the island and restricted to areas of heath vegetation (Fig. 1). On 30 October we found three nests (all c/3) on the verge of hatching at Cabo Peñas. Humphrey et al. (1970) considered it common, which suggests that habitat changes and the disruption of heath communities have affected its abundance.

Tawny-throated Dotterel (Oreopholus ruficollis).—Uncommon to rare in dry pastures and along old beach lines at Cabo Peñas (Fig. 2). A nest (c/3) was found at Ea. Los Flamencos on 12 November.

Hudsonian Godwit (Limosa haemastica).-This species arrives by late October and winters in small numbers. Our records include: 15 on the beach at Viamonte on 23 October; 20 at Viamonte on 25 October; 10 at lakes and ponds in the Rio Grande area on 10 November 1973; and 15 at Rio Grande on 29 January 1974.

Whimbrel (Numenius phaeopus).-A flock of 250 in a pasture at Viamonte on 23 October 1973 was our only observation of this species.

Greater Yellowlegs (Tringa melanoleuca).-Four at Viamonte on 23 October and 1 at Rio Grande on 26 October represent the earliest records for the species.



Figure 1. Rufous-chested Dotteral (Charadrius [Zonibyx] modestus) nesting in heath vegetation at Cabo Peñas, Isla Grande.



Figure 2. Tawny-throated Dotterel (Oreopholus ruficollis).

Ruddy Turnstone (Arenaria interpres). — Meyer de Schauensee (1966) gave Cabo San Antonio, Buenos Aires Province, as the southernmost locality for this species in Argentina. On 25 October, 1973, a flock of 10, including one bird retaining traces of summer plumage, foraged on the beach at Rio Grande. The sighting of 4 at Yrigoyen on 17 January 1974, and one at Bahía San Sebastián on 28 January 1974, indicate that this species probably winters regularly in Tierra del Fuego.

Wilson's Phalarope (Phalaropus tricolor).—Humphrey et al. (1970) knew of only one sight record.

We saw one at Laguna de los Cisnes, Rio Grande, on 24 October and three there on 26 October.

Red Knot (Calidris canutus).—We saw 500 on the beach at Rio Grande 23 October and 10 on the beach at Viamonte 25 October. Rumboll saw a few in the Rio Grande area on 28 January 1974. Humphrey et al. (1970) consider it "irregular" and give records from December through March.

Sanderling (Calidris alba).—Considered irregular by Humphrey at al. (1970). Thirty were present on the beach at Rio Grande on 25 October, and a single bird appeared at an inland pond there on

10 November 1973. Four were present at Yrigoyen on 17 January 1974.

White-rumped Sandpiper (Calidris fusicollis).—Humphrey et al. (1970) presented surprisingly little information on this abundant sandpiper. Large numbers of migrants were present by the time of our arrival on 23 October. On 25 October we saw 1000 feeding on kelp-covered beaches at Rio Grande, and numbers continued to increase into November as new migrants appeared. Our maximum count was 5000 at Laguna de los Cisnes on 30 October, and hundreds and often thousands could usually be found at that lake. We did not observe this species in the Ushuaia area.

Baird's Sandpiper (Calidris bairdii).—Common as far south as Viamonte in pasture pools, marshes, large lakes, and even coastal beaches. Flock of up to 30 were present by 23 October and numbers increased through early November, when several hundred could be seen in a day. The species is usually

associated with White-rumped Sandpipers.

Pectoral Sandpiper (Calidris melanotos).—Our observations of this species, not previously known from Isla Grande, include: 25 in a grassy pasture at Viamonte, 24 October; 4 at Viamonte, 22 October;

and 2 at Rio Grande on 27 October.

Gray-breasted Seedsnipe (Thinocorus orbignyianus).—This species, the commonest seedsnipe in Tierra del Fuego early in the century, is now quite rare. Sr. Len Bridges of Ea. Viamonte informed us that he had not seen any in four years at Viamonte, and we saw only one, at Ea. San José, on 11 November 1973. The reason for its decline is not understood but probably involves habitat changes resulting from overgrazing.

Least Seedsnipe (Thinocorus rumicivorus).—Common to abundant along the coast and up to about 15 km inland. We found newly-hatched chicks, as well as a nest that had just been started, on 9 November 1973. A small chick at Ea. La Indiana on 25 January 1975 establishes that this species nests in the southeastern part of Isla Grande, where it had not previously been known to breed.

Snowy Sheathbill (Chionis alba).-Up to 12 near Rio Grande between late October and mid-

November 1973; a few probably present all year.

Great Skua (Catharacta skua).—Seen daily in the Rio Grande area, hunting along the coast as well as over pastures and along lake shores. Up to a dozen were in the harbor at Ushuaia on 7 November. All birds seen on the island were clearly C. s. chilensis.

Kelp Gull (Larus dominicanus).—A small colony had begun to form on an island in a lake at Ea.

Los Flamencos on 31 October. Nest contents were: c/0-40+; c/1-14; c/2-20; c/3-14.

Black Skimmer (Rhynchops nigra).—An immature was seen at Cabo San Pablo on 6 Feburary 1975. Meyer de Schauensee (1966) states that the species has been recorded from Tierra del Fuego, but its occurrence was not noted by Humphrey et al. (1970).

Rock Dove (Columba livia).—We saw a few at Rio Grande area and one at Ushuaia, where it has

become established (Keith, 1970).

Short-billed Miner (Geositta antarctica).—The status of this species is not well known. We found it only in flat areas at Ea. Los Flamencos where the grass was short and fine; it avoided areas of bunch grass and the undulating terrain where G. cunicularia was abundant.

Chocolate-vented Tyrant (Neoxolmis rufiventris).—Two records: one near Ea. José Menendez on 24 October, and one, carrying a small lizard (Liolaemus sp.) at Rio Grande, 10 November. Considered

accidental by Humphrey et al. (1970) but probably commoner than the few records suggest.

Chilean Swallow (Tachycineta leucopyga).—A few were present on 23 October 1973, and a large influx occurred on the 27th, after which time the species was seen daily and in large numbers. On several days in late October, we watched flocks flying over shallow ponds. The birds concentrated their activities in the lee of small banks, where the surface of the water was smooth. We assumed that they were feeding on emerging insects, but the weather was cold and rainy, and no flying insects were evident. Subsequent examination of photographs shows that some birds were immersing the bill and the anterior part of the head fairly deeply into the water (Fig. 3). This was not drinking, but presumably an attempt to pluck larval insects from the upper layer of the pond. Such a feeding behavior would be advantageous to a species that must deal with the harsh weather in order to occupy the austral regions.

Blue-and-white Swallow (Notiochelidon cyanoleuca).—A single bird, the first arrival, appeared in Rio Grande on 29 October 1973. The species increased in early November and was almost invariably

found feeding in association with sheep in pastures, rather than near open water.

Barn Swallow (*Hirundo rustica*).—Considered accidental by Humphrey et al. (1970) but probably regular. We made sightings at Rio Grande among flocks of Chilean Swallows on 27 October, 29 October, 5 November and 10 November; at Lapataia (2 birds) 6 November; and at Ea. San José, 10 November 1973.



Figure 3. Chilean Swallow (Tachycineta leucopyga) feeding on aquatic insect larvae; note that the bird's bill and forehead are submerged. Photo: M. Rumboll.

Cliff Swallow (Petrochelidon pyrrhonata).—A single bird in a flock of Chilean Swallows at Rio Grande on 28-29 October 1973 is the southernmost record of the species and the first for Tierra del Fuego. Patagonian Yellow Finch (Sicalis lebruni).—According to Humphrey et al. (1970) this species is uncommon in the northern part of the islands. In our experience, however, it was quite rare. The few pairs we saw were all in the vicinity of gravel pits in the Rio Grande-San Sebastián area. A similar habitat preference was noted by Johnson (1967).

Comments.—Predator control measures are apparently making serious inroads on populations of Red-backed Hawks, Black-chested Buzzard-Eagles, Chimango and Crested caracaras, Upland and Ruddy-headed kelp-geese, and perhaps other species on Isla Grande. These pressures could be reversed through education. On the other hand, the pressure of habitat destruction is less easily corrected. Isla Grande is devoted to monoculture, sheep farming. Rising wool prices have encouraged farmers to increase their flocks, which, in turn, has led to serious overgrazing and habitat alterations. We suspect that our inability to find Black-throated Finches (Melanodera melanodera) despite some efforts, and the apparent scarcity of Red-breasted Meadowlarks (Pezites militaris), may be related to the disappearance of areas of moderate to tall grass; the seeming decline of the Rufous-chested Dotterel may reflect the gradual elimination of heath habitats. On the other hand, the creation of sparsely-vegetated areas may have favored the increase of the Least Seedsnipe (at the expense of the Gray-breasted species?). The precise reasons for these changes remain to be determined. Yet, it is clear that the hand of man is having a considerable and perhaps irreversible effect on the bird fauna of Isla Grande

### **PATAGONIA**

Jehl made observations along the coast of Patagonia, as opportunity presented, in conjunction with pelagic bird studies in the austral winters of 1971 and 1972. His itinerary and the results of the pelagic studies are presented elsewhere (Jehl, 1974; Jehl, Rumboll, and Winter, 1973). In 1973, we made additional observations on the distribution of birds in Patagonia while en route to and from Tierra del Fuego, 17-22 October, and 14-27 November.

Magellanic Penguin (Spheniscus magellanicus).—The northernmost known nesting colonies of Magellanic Penguins in Argentina are at Punta Tombo and Punta Clara, Chubut Province (Boswall, 1973). On 23 November 1973, we saw approximately 20 penguins huddled under small bushes on the

Caleta Valdes, on the Valdes Peninsula, some 240 km northeast of Punta Tombo. It was not possible

to approach the area, but we think it extremely likely that the birds were nesting.

Guanay (*Phalacrocorax bougainvillii*).—The occurrence of the Guanay in Argentina was established in 1967. Erize (1972) found 50 pairs nesting at Punta Tombo in 1969, Boswall and Prytherch (1972) estimated 60 nests in 1971, and we estimated 100 nests on 21-22 November 1973. Rumboll reports that the species has since spread northward and now nests in small numbers in colonies of *P. albiventer* on islands in Cabo Dos Bahías, Chubut Province.

Red-legged Cormorant (Phalacrocorax gaimardi).—According to Meyer de Schauensee (1966) this species is found in Argentina only at Puerto Deseado. Escalante (1970) states that it is restricted to Santa Cruz Province. Our observations indicate that its range is more widespread and may be expanding. In November 1973, we observed the species between Puerto Santa Cruz (2 immatures, 16 November) and 40 km S of Comodoro Rivadavia, Chubut Province (2, 19 November). Several hundred were building nests on cliffs along the south side of Rio Deseado just west of Puerto Deseado on 19 November.

In winter, Jehl observed scattered birds, within a mile or so of shore, from 24 km S of San Julián (28 August 1972) to the vicinity of Cabo Tres Puntas, on the south shore of Golfo San Jorge (16 June 1971). The largest numbers, 300 and 150, were found at the river mouth at San Julián on 13-14 June 1971, and 28 August 1971, respectively. On 27 August 1972, Jehl saw 20 birds sitting on rocky cliffs, in an apparent colony, at Bahía de los Nodales. On 18 July 1969, R. M. Gilmore and S. L. Bowen cruised southward along the coast of Golfo San Jorge and saw a few scattered birds in the vicinity of Cabo Aristizabal (Chubut Province). Bowen reported 100 birds 8 km N of Comodoro Rivadavia. The winter range of the species thus extends for approximately 300 miles, although the bulk of the population seem to remain concentrated at river mouths in Santa Cruz province.

King Cormorant (Phalacrocorax albiventer), Blue-eyed Cormorant (P. atriceps).—The status of these closely similar species on the Patagonian coast is not clear, and without reliable information on distribution, questions about habitat preferences, competitive interactions, and evolution cannot be resolved.

In winter, albiventer (Fig. 4) is abundant in the eastern Strait of Magellan and far outnumbers the handful of atriceps that are present. In at-sea transects along the Patagonian coast, Jehl saw few cormorants; the majority were atriceps, which predominated as far north as Golfo San Jorge. Farther north, albiventer was by far commoner, except at Punta Leon, near Golfo Nuevo, where atriceps predominated on 18 June 1971. In the Golfo San José-Golfo Nuevo area, atriceps made up less than 10 per cent of the wintering flocks (Jehl et al., 1973). The reversal of abundance at Golfo San Jorge may be related to a sharp break in oceanographic conditions there (see Jehl, 1974).



Figure 4. King Cormorant (Phalacrocorax albiventer).

In October 1973, atriceps and albiventer were equally common (about 20 of each) at Punta Delgada, on the Strait of Magellan, but along the Patagonian coast atriceps was the predominant, or exclusive, species through Santa Cruz Province. Observations included 10 atriceps (no albiventer) near the river mouth at Rio Gallegos, a large colony of cormorants (species uncertain) nesting on an island at San Julián, and 2500 large cormorants, predominantly atriceps (20:1), flying out to sea at Puerto Deseado.

In November we found only *P. albiventer* at Punta Tombo, where the colony has been estimated at 5000 birds (Boswall and Prytherch, 1972). However, Rumboll has examined a photograph taken there by Des and Jen Bartlett in late January 1974 that clearly shown an adult *P. atriceps* attending

a chick.

It is Jehl's impression that atriceps may be slightly more pelagic than albiventer and prefers to feed in more turbulent waters.

Magellanic Oystercatcher (Haematopus leucopodus).—The Argentine breeding range of this oystercatcher, considered by Meyer de Schauensee (1966) as restricted to Tierra del Fuego and Staten Island, is much more extensive. Zapata (1967) reported the species nesting at Rio Deseado in northern Santa Cruz Province, and we found it uncommon to rare, but widely distributed, in suitable habitat along Rte. 3 in southern Santa Cruz Province. Our only observation between the Strait of Magellan and Rio Gallegos was of a dead chick near Punta Delgada, Chile, 14 November 1973. This species was generally scarce between Rio Gallegos and the mouth of Rio Coyle, though we observed several pairs in range land 30 km N of Ea. Guer Aike that were providing target practice for the local militia; one freshly-killed and decapitated bird was found along the shoulder of this highway. Rumboll also reports that it nests along the entire valley of the Rio Santa Cruz as far west of Lago Argentino, near the base of the Andes.

The species was fairly common between Rio Coyle and Puerto Santa Cruz. Definite evidence of breeding included a nest with one egg (collected) at Hotel Lemarchand, 21 October 1973, and a pair with a large chick (wt. 75 g collected) 15 km S of Puerto Santa Cruz, 15 November 1973. We found no evidence of the species in high plateau country between Puerto Santa Cruz and San Julián, but from San Julián to El Salado it was uncommon. From there to Bahia Laura there seemed to be no suitable habitat. Our northernmost observation was of a pair, presumably breeding, near a pond at Bahía Laura.

Korschenewski (1969) stated that the Magellanic Oystercatcher occurs at Punta Tombo, Chubut Province, year-round and supposed that it might breed. However, we did not find it there on 21-22 November 1973, nor did Boswall and Prytherch (1972) in November 1971. Korschenewski did not clearly distinguish between the Magellanic and American (H. palliatus) oystercatchers in his report and confusion seems probable. The possibility of more northern inland breeding localities should not be discounted. The British Museum collections include four specimens taken during the breeding season (October-November 1901) at Lago Blanco, Chubut Province (identification confirmed by P.J.K. Burton). The precise locality of this lake is uncertain. Also, Sr. Juan Munoz of Puerto Madryn informed Jehl (pers. comm.) of large flocks of oystercatchers far inland, near Lago Aleusco, Chubut Province, in December 1972 and January 1973.

American Oystercatcher (Haematopus palliatus). — According to Meyer de Schauensee (1966) the range of this species in Argentina extends south to Chubut and occasionally Santa Cruz province. Actually, it breeds fairly commonly along the entire coast of Santa Cruz Province south to San Julian and, we suspect, Puerto Santa Cruz. Venegas (1973) has recently reported this species at the Strait of Magellan.



Figure 5. Great Skua (Catharacta skua antarctica) nesting at Punta Tombo, Argentina.



Figure 6. Band-tailed Gull (Larus belcheri) at Puerto Belgrano, Argentina.

In Chubut Province, the American Oystercatcher is abundant on the Valdes Peninsula (see Jehl et al., 1973). We also estimated 15-18 pairs at Punta Tombo (21-22 November 1973), and several pairs at Bahía Camarones (20 November). In Santa Cruz Province we found birds at Caleta Olivia (2 pairs, 19 November), Puerto Deseado (8 pairs plus 36 non-breeders, 19 November), Bahía Laura (16 birds, 18 November) and San Julián (5 pairs, 17 November). At San Julián we saw one bird flying inland along the river carrying food and another was obviously guarding a chick. Islands in the river mouth at Puerto Santa Cruz should provide adequate habitat for this species, but we were unable to visit them.

Magellanic Plover (Pluvianellus socialis).—The biology of this unusual species has been discussed elsewhere (Jehl, 1975). In January 1976, Robert W. Storer (pers. comm.) found five or six pairs nesting at Laguna Las Escarchadas, 50 km E of Calafate, in extreme southwestern Santa Cruz Province, and on 2 February 1976, Rumboll observed 17 birds including two juveniles at Ea. Tapi Aike, approximately 90 km SE of Calafate. These observations extend the breeding range of Pluvianellus inland nearly to the base of the Andes, and it now seems probable that the species nests throughout the valleys drained by the rios Coig, Santa Cruz, and Gallegos.

Ruddy Turnstone (Arenaria interpres).—Two in Bahía de los Nodales on 27 August 1972 represented, at that time, the southernmost records for the species on the Atlantic coast.

Great Skua (Catharacta skua).—At the pinguinera at Cabo dos Bahías, Chubut Province, we observed about 8 skuas on 20 November 1973 and at Punta Tombo estimated about 15 pairs plus 20 or so non-breeding birds. As reported by Olrog (in Boswall and Prytherch, 1972) the skuas of Punta Tombo as well as at Cabo Dos Bahías, are referable to C. s. antarctica (Fig. 5) and show no sign of introgression with C. s. chilensis. The northernmost breeding area for chilensis is not known but is presumably in southern Santa Cruz Province.

Band-tailed Gull (Larus belcheri).—Common in the immediate vicinity of the naval base at Puerto Belgrano, 25-28 June 1971, where it was feeding on scraps from ships (Fig. 6). Scavenging on garbage is apparently an unusual behavior for this gull (Escalante, 1966). The dimensions of small series obtained on hook and line are: Culmen:  $5\,\mathring{\sigma}$ , 51.2-54.4(52.6) mm;  $8\,\mathring{\varphi}$ , 45.2-51.5 (47.4) mm. Bill depth at gonys:  $4\,\mathring{\sigma}$ , 17.0-18.8(17.1 mm);  $8\,\mathring{\varphi}$ , 16.2-18.8 (17.2)mm. Wing (chord):  $5\,\mathring{\sigma}$ , 396-422 (405) mm;  $8\,\mathring{\varphi}$ , 372-405 (398) mm. Tail:  $5\,\mathring{\sigma}$ , 158-176 (167) mm;  $8\,\mathring{\varphi}$ , 155-166 (157) mm. Tarsus:  $5\,\mathring{\sigma}$ , 58.2-63.3 (60.6) mm;  $8\,\mathring{\varphi}$ , 39.5-8.7 (56.9) mm. Weight:  $5\,\mathring{\sigma}$ , 760-933 (840) g;  $10\,\mathring{\varphi}$ , 650-715 (678) g. On all specimens the legs were bright yellow, the iris brown, the orbital ring orange-red.

Of more than 200 gulls in the area, no more than four were sub-adult, and only one was in juvenal plumage. None of the adults showed the "hooded" plumage that characterizes the Pacific population of *L. belcheri*. Escalante (1966) and Olrog (1967) have also commented on the absence of a hood in

winter birds from the Atlantic coast.

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